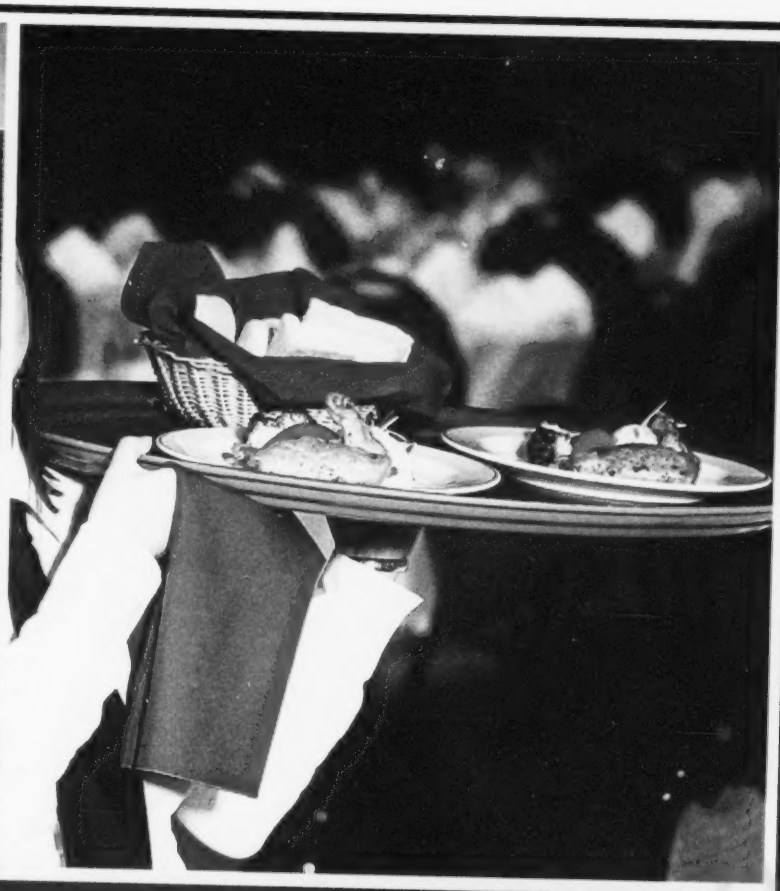

OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA

Lost-Time Claims, Disabling Injury Claims and Claim Rates

Wholesale and Retail Industries 2005 to 2009

WORK SAFE ALBERTA

Summer 2010

Government of Alberta

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HIGHLIGHTS

Lower lost-time and disabling injury rates in 2009.

- In 2009, the Wholesale and Retail sector lost-time claim rate decreased by 7.0% to 1.85 per 100 person-years worked, from 1.99 per 100 person-years worked in 2008. The average lost-time claim rate for all sectors in the province was 1.69 per 100 person-years worked.
- In 2009, the Wholesale and Retail sector had a duration rate of 34. This duration rate is lower than the provincial rate of 40 days lost per 100 person-years worked.
- The disabling injury rate decreased by 7.8%, from 3.44 per 100 person-years worked in 2008 to 3.17 in 2009. The average disabling injury rate for all sectors in the province was 3.09 per 100 person-years worked.
- The decreases in the lost-time claim and disabling injury rates in 2009 were the result of decreases in the numbers of lost-time and injury claims. Lost-time claims decreased by 14.0% and disabling injury claims by 14.7%.
- The 2009 fatality rate for the Wholesale and Retail sector was 34 per million person-years worked. The average fatality rate for all sectors in the province in 2009 was 71 per million person-years worked.

Small size employers experienced the lowest injury rates.

- Employers with less than 10 person-years worked had the lowest lost-time claim rate in 2009, at 1.19 per 100 person-years worked.
- Employers with less than 10 person-years worked had the lowest disabling injury rate in 2009, at 1.46 per 100 person-years worked.

Injury rates decreased in most sub-sectors.

- Lost-time claim and disabling injury rates decreased in most Wholesale and Retail sub-sectors, except for the Office, Medical and Entertainment Equipment sub-sector, which showed increases in their lost-time claim and disabling injury rates in 2009.
- The Office, Medical and Entertainment Equipment sub-sector had the lowest lost-time claim and disabling injury rates at 0.49 and 0.77 per 100 person-years worked in 2009.
- The Wholesale and Retail sector accounted for 19.3% of the person-years worked in the province, 21.0% of the lost-time claims, 20.3% of modified work claims, and 19.8% of the disabling injury claims.

In 2009, sprains, strains and tears were the most common nature of injury.

- Sprains, strains and tears continued to be the leading nature of injury, accounting for 53.5% of the disabling injury claims submitted in the Wholesale and Retail sector.
- The back (including spine and spinal cord) was the most commonly injured body part, accounting for 27.0% of all disabling injury claims. Lost-time claims connected with body systems displayed a proportion that was 0.3 times the average for all sectors.
- The primary sources of injury causing disabling injury claims were containers, accounting for 20.9% of the disabling injury claims, followed by persons, plants, animals and minerals, 19.0%. The person – other than injured or ill worker category had a lower frequency of disabling injury claims at 0.1 times the frequency for all sectors in the province.
- In 2009, the most common type of event or exposure was bodily reaction or exertion which accounted for 48.6% of disabling injury claims. Disabling injury claims caused by assaults and violent acts had a proportion that was 0.4 times the average for all sectors.

A few notes about this report:

- This report presents 2009 data beside 2008 data to help with comparisons. Additional historical data are presented where possible.
- Information presented in this report is based on incidents that occurred during 2009 and were accepted as lost-time or modified work claims by Workers' Compensation Board – Alberta (WCB) as of March 31, 2010.
- Injury claim rates based on a small number of person-years worked are too volatile to make valid comparisons over time. Therefore, claim rates are not calculated when there are fewer than 40 person-years worked. Duration rates are also volatile when based on a small number of lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.
- Estimates of year-over-year change for rates presented in this report are calculated using unrounded figures and may not match those produced from rounded figures. Percentages displayed in tables may also not total 100, due to rounding.
- Throughout the report, the lost-time claim rate is the number of lost-time claims per 100 person-years worked, the disabling injury rate is the number of disabling injury claims per 100 person-years worked and the duration rate is the number of days lost per 100 person-years worked. Fatality rates are expressed as the number of fatalities per million person-years worked.
- Analyses by industry are based on WCB industry classification and aggregation. For more information see http://ds.wcb.ab.ca/WCB.RateManual.WebServer/alphaindex.aspx.
- Analyses by occupation group are based on the National Occupational Classification (NOC). The NOC provides a standard list of occupations across the country. For more information see http://www5.hrsdc.gc.ca/NOC.
- Occupational injuries and diseases listed throughout this report are based on the Z795 Coding of Work Injury or Disease Information produced by the Canadian Standards Association (CSA) for categorizing occupational injury and disease. For information see http://www.shopcsa.ca/onlinestore/GetCatalogItemDetails.asp?mat=2416404.
- Terms, definitions and formulas used throughout this report are described in Appendix A.

INTRODUCTION

Role of the Ministry of Employment and Immigration

The Ministry of Employment and Immigration includes the reporting entity of the Department of Employment and Immigration (E&I). E&I develops and delivers policies, programs and services to foster labour force development; ensure fair, safe and healthy workplaces; and help those in need. The Department also provides leadership for immigration and interprovincial labour mobility policy for the Government of Alberta, and coordinates resources to support the settlement and integration of new Albertans.

Occupational Injuries and Diseases in Alberta – Wholesale and Retail Industries 2005 to 2009

E&I prepares this annual report to provide analysis of workplace health and safety information to meet the demand from industry and safety associations, labour organizations, employers and workers for incorporating this information into their strategic plans for enhancing workplace health and safety. This includes:

- descriptions of programs and initiatives undertaken in pursuit of its workplace health and safety mission and goals;
- analysis of provincial occupational injury and disease information;
- estimations of the risk of injury or disease at the provincial, industry sector and sub-sector level as well as general descriptions about the incidents and injured workers.

The *Occupational Injuries and Diseases in Alberta* publications present analysis of aggregate injury claim data to allow for the tracking of workplace health and safety performance over time. This is important for evaluating past and present performance, and in providing strategic information for the direction of workplace health and safety policy. The analysis contained in this report provides a comprehensive picture of workplace injuries in the province, allowing for a prevention focus to be made based on injury probabilities, rather than possibilities.

Healthy and Productive Workplaces

E&I promotes safe, healthy and productive workplaces, as well as fair, equitable and stable labour relations to ensure a fair, safe and healthy work environment for Alberta's workers. Work is central to people's lives, and to the stability of families and societies. People want work that provides them with an acceptable standard of living. It is important that workers enter an environment where their health and safety are protected, where they are treated with respect and they are compensated fairly for the job they are doing. This results in an attractive workplace that furthers the position of Alberta employers to be competitive in the

global economy (see Note 1.1). Alongside the human cost of occupational injuries and diseases and the impact on families and society, the economic costs are numerous.

Claim costs for occupational injury and disease by WCB are projected to total $700 million in 2010.[1] These costs are ultimately paid by employers through premium payments, and impact the costs of running a business as well as the final cost of delivering products and services. Further costs associated with occupational injuries and diseases include the material damage to equipment and premises, the additional cost of hiring staff to cover for injured workers, and the lost productivity resulting from the absence. Additional impacts of poor health and safety for employers include higher absenteeism and lower morale of employees, loss of skilled and experienced employees, loss of the company's investment in training, and difficulty recruiting high-quality employees due to the loss of image (particularly in the case of subcontractors to larger companies) all leading to losses in productivity and underutilization of production (see Note 1.2).

Note 1.1
Research by the International Institute for Management Development and the World Economic Forum suggests that the safest-working countries also have the best competitiveness ratings ***(ILO, XVIIth World Congress on Safety and Health at Work, Introductory Report: Decent Work-Safe Work, September 2005).***

Other costs borne by the economy and society due in part to work-related injuries and diseases include early retirements, unemployment and poorer households. The International Labour Organization (ILO) estimates that in high-income countries, around 40% of all retirements (before statutory age) are caused by disability. This is equivalent to around 14% of the lifetime working capacity of the employed labour force.[2] Occupational injuries and diseases also affect unemployment and household income levels. Workers with an impairment of capacity can reduce their re-employability and impact household income. Workplace injuries and diseases typically reduce the overall earnings of households and in certain cases, family members have to give up jobs in order to care for an injured worker.

Note 1.2
The International Labour Organization (ILO) estimates that approximately 4% of Gross Domestic Product is lost due to occupational injuries and diseases (*ILO, World Day for Safety and Health at Work 2009 –Facts on safety and health at work issues, April 2009).*

1 See the Workers Compensation Board Alberta 2010 Premium Rate Manual
https://www.wcb.ab.ca/pdfs/employers/10_premium_rate_manual.pdf
2 See the International Labour Organization report: Safety in numbers – pointers for a global safety culture at work
http://www.ilo.org/public/english/region/eurpro/budapest/download/safety_in_numbers_engl.pdf

PROVINCIAL SUMMARY

The positive trend continues: there were fewer injuries reported and the injury rates declined in 2009.

In recent years, improvements were made to the analysis of WCB claim information allowing for modified work claims to be analyzed alongside lost-time claims. Using modified work claim data in addition to lost-time claim data ensures a more comprehensive picture of workplace injuries, and allows for greater insight into incident prevention.

A lost-time claim is a claim submitted to the WCB for an occupational injury or disease that causes a worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function (for example, hearing loss claims).

Note 2.1

- **The lost-time claim rate represents the probability or risk of an injury or disease to a worker requiring time away from work, during a period of one year of work.**
- **The disabling injury rate represents the probability or risk of a disabling injury.**

A modified work claim is submitted for an occupational injury or disease where workers have their normal work duties altered enabling them to remain working without losing time from work. Included in the figures are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease, and cases where workers were provided modified duties prior to time lost because of an injury or disease.

Modifying an injured worker's duties can be beneficial for both an employer and an employee. For the employer, the financial cost of an absent worker can be high and returning an injured employee to work as soon as it is medically possible is important for properly managing compensation, disability claims and productivity levels. For the employee, returning to work as soon as medically possible is beneficial both physically and psychologically, and is linked to quicker recovery rates and higher self-esteem. Long absences from the workplace are also linked to decreases in labor market attachment.

The number of disabling injury claims reflects both the lost-time and modified work concepts and produces an overall figure where an occupational injury or disease disables a worker causing either time lost from work or for normal work duties to be modified.

In 2009, a total of 26,096 lost-time claims were accepted by WCB. This is a decrease of 16.9% from 2008. In contrast, the person-years worked estimates decreased by 7.9% to 1,539,738 between 2008 and 2009 (see Table 2.1). Expressed as a lost-time claim rate, the data translates into a rate of 1.69 per 100 person-years worked, a decrease of 9.8% from 2008, as proportionately there were fewer lost-time injury claims. The 2009 rate is the

lowest in the past nineteen years, and since 1991 the lost-time claim rate has decreased by 59.1%. Since 2005, the lost-time claim rate has decreased by 29.7%.

Table 2.1
Provincial Figures – Alberta: 2008 and 2009

	2008	2009	% Change
Person-years worked	1,671,916	**1,539,738**	-7.9%
Lost-time claims	31,410	**26,096**	-16.9%
Lost-time claim rate	1.88	**1.69**	**-9.8%**
Modified-work claims	51,725	**34,818**	-32.7%
Lost-time claims involving modified-work	22,443	**13,409**	-40.3%
Disabling injury claims	60,692	**47,505**	-21.7%
Disabling injury rate	3.63	**3.09**	**-15.0%**
Duration rate	41	**40**	-3.2%
Days lost (LTC)	689,523	**614,757**	-10.8%
Transaction claim costs (LTC)	$211,054,921	**$195,089,312**	-7.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The total number of modified work claims submitted in 2009 was 34,818, a decrease of 32.7%. There were 13,409 claims involving both lost-time and modified work, a decrease of 40.3% from 2008. There were 47,505 disabling injury claims, a decrease of 21.7% from 2008. Expressed as a rate, the 2009 disabling injury rate was 3.09 per 100 person-years worked, a decrease of 15.0% from the 2008 rate of 3.63.

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Three basic measures of severity are the duration rate, median days lost from work and average days lost from work. The efforts of employers to introduce modified work programs to integrate injured workers back into the workforce also have a positive impact on work days lost. The duration rate of 40 days lost per 100 person-years worked was 3.2% lower than in 2008. The median number of work days lost in 2009 was seven, the same as 2008, and the average days lost increased to 24, from 22 in 2008.

Table 2.2 displays the lost-time claim and disabling injury figures and rates for the province, and also for the major industry sectors in Alberta. The data provides a useful setting for analyzing the health and safety performance of the Wholesale and Retail industries.

The 2009 lost-time claim rate for the Wholesale and Retail sector of 1.85 per 100 person-years worked was higher than the Mining and Petroleum Development sector, the Business, Personal and Professional Services sector, the Manufacturing, Processing and Packaging sector and the Construction and Construction Trade Services sector, although lower than the other three major industry sectors. The disabling injury rate, 3.17 per 100 person-years worked, was higher than the Mining and Petroleum Development sector, the Business,

Personal and Professional Services sector, the Public Administration, Education and Health Services sector and the Agriculture and Forestry sector but lower than the other three major industry sectors.

Table 2.2
Lost-Time Claim and Disabling Injury Rates by Major Industry Sector – Alberta: 2008 and 2009

Major Industry Sector	2008		2009	
	Lost-Time Claim Rate	Disabling Injury Rate	Lost-Time Claim Rate	Disabling Injury Rate
Alberta	1.88	3.63	**1.69**	**3.09**
Agriculture and Forestry	2.72	3.65	**2.36**	**3.02**
Business, Personal and Professional Services	1.20	1.79	**1.08**	**1.57**
Construction and Construction Trade Services	1.91	4.65	**1.73**	**3.92**
Manufacturing, Processing and Packaging	2.24	5.78	**1.65**	**4.42**
Mining and Petroleum Development	0.66	2.92	**0.53**	**2.03**
Public Administration, Education and Health Services	2.29	3.00	**2.21**	**2.90**
Transportation, Communication and Utilities	2.69	4.42	**2.44**	**3.98**
Wholesale and Retail	1.99	3.44	**1.85**	**3.17**

Data Source: WCB Data, Prepared by Data Development and Evaluation

INDUSTRY SECTOR SUMMARY

In 2009, the lost-time claim rate for the Wholesale and Retail sector was 1.85 per 100 person-years worked.

The Wholesale and Retail sector lost-time claim rate decreased in 2009 by 7.0% to 1.85 per 100 person-years worked, from 1.99 in 2008. The disabling injury rate decreased by 7.8%, to 3.17 per 100 person-years worked (see Table 3.1). The average lost-time claim rate for all sectors in the province was 1.69 per 100 person-years worked and the average disabling injury rate was 3.09 per 100 person-years worked.

The decreases in the 2009 lost-time claim and disabling injury rates for the Wholesale and Retail sector were the result of decreases in the number of lost-time and disabling injury claims. The decrease in claims was a result of decreases in most of the sub-sectors.

Table 3.1
Wholesale and Retail Industries – Alberta: 2008 - 2009

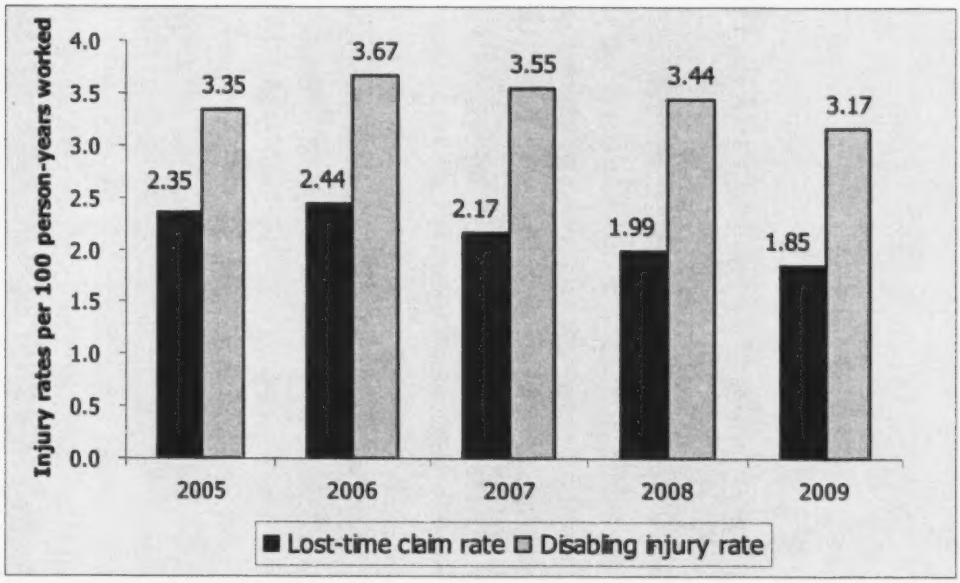
	2008	2009	% Change
Person-years worked	320,407	296,534	-7.5%
Lost-time claims	6,369	5,479	-14.0%
Lost-time claim rate	**1.99**	**1.85**	**-7.0%**
Modified-work claims	9,612	7,067	-26.5%
Lost-time claims involving modified work	4,973	3,152	-36.6%
Disabling injury claims	11,008	9,394	-14.7%
Disabling injury rate	**3.44**	**3.17**	**-7.8%**
Duration rate	33	34	1.5%
Days lost (LTC)	105,990	99,544	-6.1%
Compensation payments (LTC)	$29,406,636	$29,425,280	0.1%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Three basic measures of severity are the duration rate, median days lost from work and average days lost from work. The severity of injuries and diseases increased in 2009, as reflected by a higher duration rate. In 2009, the Wholesale and Retail sector had a duration rate of 34, a 1.5% increase from the 2008 rate of 34 and lower than the provincial rate of 40.

Since 2005 (see Chart 3.1), the lost-time claim rate for the Wholesale and Retail sector decreased by 21.3%.

Chart 3.1
Injury Rates for Wholesale and Retail Industries - Alberta: 2005 - 2009



Data Source: WCB Data, Prepared by Data Development and Evaluation

Rates by Employer Size

In the Wholesale and Retail sector, employers with greater than 100 person-years worked had the highest lost-time claim rate at 2.23 per 100 person-years worked, followed by employers with 49 to 99 person-years worked, 1.66. Employers with less than 10 person-years worked had the lowest rate, 1.19 (see Table 3.2). Disabling injury rates were higher for employers with greater than 100 person-years at 4.30 per 100 person-years worked, followed by employers with 49 to 99 person-years worked at 2.52 per 100 person-years worked.

Table 3.2
Lost-Time Claim and Disabling Injury Rate by Size of Employer-Alberta: 2009

Size of Employer	Number of Accounts	Person-Years Worked	Lost-Time Claims	Disabling Injuries	Lost-time Claim Rate	Disabling Injury Rate
Less than 10 person-years worked	15,914	43,138	515	630	1.19	1.46
10 to 19 person-years worked	1,882	26,585	379	530	1.43	1.99
20 to 39 person-years worked	1,106	30,941	459	624	1.48	2.02
40 to 99 person-years worked	763	47,625	792	1,201	1.66	2.52
100 or more person-years worked	360	148,246	3,300	6,373	2.23	4.30
Unspecified	21	N/A*	34	36	N/A*	N/A*

* These are employers with no payroll information or with person-years worked equal to zero
Data Source: WCB Data, Prepared by Data Development and Evaluation

Distribution of Injury Claims

For the Wholesale and Retail sector, 91% of employers had no lost-time claims and 90% of employers had no disabling injury claims, meaning the injuries and diseases are the results of incidents occurring at the operations of 10% of the employers. In 2009, the number of employers with no lost-time claims and the number of employers with no disabling injury claims translates to approximately 41% and 36% of the total person-years worked in the Wholesale and Retail sector respectively (see Table 4.10).

For employers with submitted claims, 65% submitted one lost-time claim, 29% two to five claims and around 5% six or more lost-time claims. For disabling injury claims, 60% submitted one disabling injury claims, 30% two to five claims and 9% six or more disabling injury claims.

Employers that submitted one to five lost-time claims and employers that submitted one to five disabling injury claims accounted for around 28% and 26% of the total person-years worked in the Wholesale and Retail sector respectively. Employers that submitted six or more lost-time claims and employers that submitted six or more disabling injury claims accounted for approximately 31% and 38% of the total person-years worked in the Wholesale and Retail sector.

Yard and Home Improvement Centres had the highest lost-time claim rate of all the Wholesale and Retail sub-sectors.

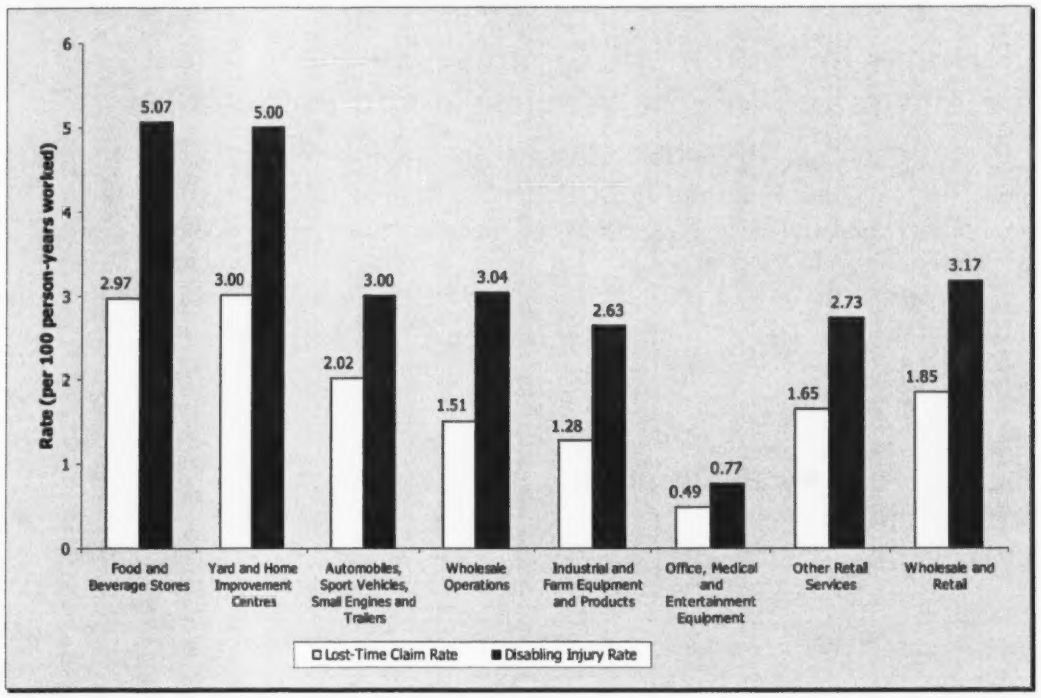
Table 4.1 shows that lost-time claim rates have decreased for most sub-sectors since 2005. For example, the Food and Beverage Stores sub-sector displayed a 34.0% decrease in the lost-time claim rate from the rate in 2005. The Office, Medical and Entertainment Equipment sub-sector had the lowest lost-time claim rate in each year. In 2009, the Office, Medical and Entertainment Equipment sub-sector experienced the lowest lost-time claim and disabling injury rates at 0.49 and 0.77 per 100 person-years respectively (see Chart 4.1).

Table 4.1
Lost-Time Claim Rate by Wholesale and Retail Sub-Sector — Alberta: 2005-2009

Sub-Sector	2005	2006	2007	2008	2009
Wholesale and Retail	**2.35**	**2.43**	**2.17**	**1.99**	**1.85**
Wholesale Operations	2.10	2.33	2.03	1.71	**1.51**
Food and Beverage Stores	4.50	4.73	3.84	3.07	**2.97**
Industrial and Farm Equipment and Products	1.64	1.82	1.50	1.57	**1.28**
Automobiles, Sport Vehicles, Small Engines and Trailers	2.69	2.58	2.40	2.11	**2.02**
Office, Medical and Entertainment Equipment	0.42	0.39	0.33	0.44	**0.49**
Yard and Home Improvement Centres	3.82	3.92	3.28	3.44	**3.00**
Other Retail Services	1.71	1.76	1.81	1.79	**1.65**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Chart 4.1
Lost-Time Claim and Disabling Injury Rates by Wholesale and Retail Sub-Sector — Alberta: 2009



Data Source: WCB Data, Prepared by Data Development and Evaluation

Wholesale Operations

In 2009, the Wholesale Operations sub-sector had a lost-time claim rate of 1.51 per 100 person-years, lower than the average rate for all sectors in the province. The disabling injury rate was 3.04, lower than the provincial rate of 3.09 per 100 person-years worked. The duration rate was 30 days lost per 100 person-years worked, a decrease of 2.3% from 2008 (see Table 4.2). Over the past five years, the lost-time claim rate for the Wholesale Operations sub-sector has decreased from 2.10 in 2005 to 1.51 per 100 person-years worked in 2009. The median and average days lost were six and 20 days per claim. The coinciding figures for all sectors in the province were seven and 24.

Table 4.2
Wholesale Operations — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	28,922	**26,747**	-7.5%
Lost-time claims	496	**403**	-18.8%
Lost-time claim rate	**1.71**	**1.51**	**-12.1%**
Modified-work claims	984	**633**	-35.7%
Lost-time claims involving modified work	397	**224**	-43.6%
Disabling injury claims	1,083	**812**	-25.0%
Disabling injury rate	**3.74**	**3.04**	**-18.9%**
Duration rate	31	**30**	-2.3%
Days lost (LTC)	8,924	**8,067**	-9.6%
Transaction claim costs (LTC)	$2,623,340	**$2,889,766**	10.2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Food and Beverage Stores

The lost-time claim rate for the Food and Beverage Stores sub-sector decreased by 3.3% from 3.07 per 100 person-years in 2008 to 2.97 per 100 person-years in 2009. The disabling injury rate has increased by 2.4%. The duration rate was 49 days lost per 100 person-years worked in 2009, a 7.5% increase from 2008 (see Table 4.3). The median days lost was five, two days shorter than the respective provincial figure. The average days lost per claim was 17, while the average figure for all sectors was 24, providing indications of a low severity of injury in this sub-sector.

Between 2005 and 2009, the lost-time claim rate in the Food and Beverage Stores sub-sector decreased by 34.0%, from 4.50 in 2005 to 2.97 per 100 person-years worked in 2009.

Table 4.3
Food and Beverage Stores — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	57,671	**52,966**	-8.2%
Lost-time claims	1,771	**1,573**	-11.2%
Lost-time claim rate	**3.07**	**2.97**	**-3.3%**
Modified-work claims	2,596	**2,146**	-17.3%
Lost-time claims involving modified work	1,512	**1,035**	-31.5%
Disabling injury claims	2,855	**2,684**	-6.0%
Disabling injury rate	**4.95**	**5.07**	**2.4%**
Duration rate	46	**49**	7.5%
Days lost (LTC)	26,414	**26,087**	-1.2%
Transaction claim costs (LTC)	$5,945,881	**$6,257,698**	5.2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Industrial and Farm Equipment and Products

In 2009, the lost-time claim rate for the Industrial and Farm Equipment and Products sub-sector was 1.28 per 100 person-years worked, below the provincial figure of 1.69. The disabling injury rate decreased 13.3%, from 3.04 in 2008 to 2.63 per 100 person-years worked in 2009. The duration rate decreased by 4.5% from 33 days lost per 100 person-years worked in 2008 to 31 days lost per 100 person-years worked in 2009 (see Table 4.4). The median and average days lost were seven and 25. The median and average days lost for all sectors were seven and 24 respectively.

Over the past five years, the lost-time claim rate in the Industrial and Farm Equipment and Products sub-sector decreased by 22.0%. The rate decreased from 1.64 in 2005 to 1.28 per 100 person-years worked in 2009. The person-years worked grew by 2.7% since 2005.

Table 4.4
Industrial and Farm Equipment and Products — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	52,897	**48,464**	-8.4%
Lost-time claims	833	**618**	-25.8%
Lost-time claim rate	**1.57**	**1.28**	**-19.0%**
Modified-work claims	1,359	**970**	-28.6%
Lost-time claims involving modified work	585	**311**	-46.8%
Disabling injury claims	1,607	**1,277**	-20.5%
Disabling injury rate	**3.04**	**2.63**	**-13.3%**
Duration rate	33	**31**	-4.5%
Days lost (LTC)	17,344	**15,174**	-12.5%
Transaction claim costs (LTC)	$6,825,421	**$5,479,576**	-19.7%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Automobiles, Sport Vehicles, Small Engines and Trailers

In 2009, the Automobiles, Sport Vehicles, Small Engines and Trailers sub-sector had a lost-time claim and disabling injury rate of 2.02 and 3.00 per 100 person-years worked, respectively. Both rates decreased by 4.3% and 6.3% from the rate in 2008 respectively. The duration rate was 42 per 100 person-years worked (see Table 4.5). The median and average days lost for this sub-sector were six and 21 respectively.

Table 4.5
Automobiles, Sport Vehicles, Small Engines and Trailers — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	49,818	**45,931**	-7.8%
Lost-time claims	1,049	**926**	-11.7%
Lost-time claim rate	**2.11**	**2.02**	**-4.3%**
Modified-work claims	1,192	**824**	-30.9%
Lost-time claims involving modified work	647	**373**	-42.3%
Disabling injury claims	1,594	**1,377**	-13.6%
Disabling injury rate	**3.20**	**3.00**	**-6.3%**
Duration rate	41	**42**	1.7%
Days lost (LTC)	20,591	**19,316**	-6.2%
Transaction claim costs (LTC)	$5,771,692	**$5,933,987**	2.8%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Office, Medical and Entertainment Equipment

In 2009, the Office, Medical and Entertainment Equipment sub-sector's lost-time claim rate was 0.49 per 100 person-years worked, while the disabling injury rate was 0.77. Both were the lowest rates of all sub-sectors in the Wholesale and Retail sector. The duration rate increased to 10 days lost per 100 person-years worked from seven days lost per 100 person-years worked in 2008 (see Table 4.6). The median and average days lost were also low, at 4 and 19. Both were lower than the provincial figures of seven and 24.

Between 2005 and 2009, the lost-time claim rate for the Office, Medical and Entertainment Equipment sub-sector was the lowest in the Wholesale and Retail sector.

Table 4.6
Office, Medical and Entertainment Equipment — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	25,763	**20,257**	-21.4%
Lost-time claims	114	**100**	-12.3%
Lost-time claim rate	**0.44**	**0.49**	**11.6%**
Modified-work claims	127	**115**	-9.4%
Lost-time claims involving modified work	87	**60**	-31.0%
Disabling injury claims	154	**155**	0.6%
Disabling injury rate	**0.60**	**0.77**	**28.0%**
Duration rate	7	**10**	29.9%
Days lost (LTC)	1,898	**1,939**	2.2%
Transaction claim costs (LTC)	$456,387	**$588,339**	28.9%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Yard and Home Improvement Centres

The Yard and Home Improvement Centres sub-sector had a lost-time claim rate of 3.00 per 100 person-years worked in 2009, a decrease of 12.5% from 2008. The disabling injury rate also decreased by 17.8% to 5.00 per 100 person-years worked. The decreases were caused by a 16.4% decrease in lost-time claims and a 21.4% decrease in disabling injury claims. The duration rate was 54 days lost per 100 person-years worked (see Table 4.7). The median days lost was five, while the average days lost was 18. Both numbers were lower than their coinciding figure for all sectors, indicating a lower severity of injury in this sub-sector.

Between 2005 and 2009, the lost-time claim rate for the Yard and Home Improvement Centres sub-sector has decreased by 21.3%, from 3.82 to 3.00 per 100 person-years worked.

Table 4.7
Yard and Home Improvement Centres — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	13,653	13,048	-4.4%
Lost-time claims	469	392	-16.4%
Lost-time claim rate	**3.44**	**3.00**	**-12.5%**
Modified-work claims	744	501	-32.7%
Lost-time claims involving modified work	383	241	-37.1%
Disabling injury claims	830	652	-21.4%
Disabling injury rate	**6.08**	**5.00**	**-17.8%**
Duration rate	52	54	3.2%
Days lost (LTC)	7,104	7,005	-1.4%
Transaction claim costs (LTC)	$2,142,600	$2,095,168	-2.2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Other Retail Services

The lost-time claim rate for the Other Retail Services sub-sector was 1.65 per 100 person-years worked in 2009, while the disabling injury rate was 2.73 per 100 person-years worked. Both figures were below the provincial figures of 1.69 and 3.09 per 100 person-years worked. The duration rate was 25 days lost per 100 person-years worked (see Table 4.8). The median and average days lost were five and 15. Both figures were lower than their coinciding figures for all sectors.

Table 4.8
Other Retail Services — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	91,684	**89,120**	-2.8%
Lost-time claims	1,637	**1,467**	-10.4%
Lost-time claim rate	**1.79**	**1.65**	**-7.8%**
Modified-work claims	2,610	**1,878**	-28.0%
Lost-time claims involving modified work	1,362	**908**	-33.3%
Disabling injury claims	2,885	**2,437**	-15.5%
Disabling injury rate	**3.15**	**2.73**	**-13.1%**
Duration rate	26	**25**	-4.8%
Days lost (LTC)	23,715	**21,956**	-7.4%
Transaction claim costs (LTC)	$5,641,315	**$6,180,746**	9.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Distribution of injury claims

Table 4.9 presents figures for the proportion of employers without lost-time or disabling injury claims in 2009, by sub-sector. Table 4.10 presents the respective person-years worked for these employers in 2009. Table 4.11 displays figures for the number of claims submitted by employers.

Table 4.9
Proportion of Employers with no Lost-Time or Disabling Injury Claims, by Wholesale and Retail Sub-Sector – Alberta: 2009

Proportion of Employers by Sub-Sector	With no Lost-Time Claims	With no Disabling Injury Claims
Wholesale and Retail	**91%**	**90%**
Wholesale Operations	87%	84%
Food and Beverage Stores	93%	92%
Industrial and Farm Equipment and Products	93%	90%
Automobiles, Sport Vehicles, Small Engines and Trailers	87%	85%
Office, Medical and Entertainment Equipment	96%	96%
Yard and Home Improvement Centres	78%	73%
Other Retail Services	93%	93%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The Food and Beverage Stores sub-sector, the Office, Medical, and Entertainment Equipment sub-sector and the Other Retail Services sub-sector had higher proportions of

employers with no lost-time or disabling injury claims than the average for the Wholesale and Retail sector. In 2009, the number of employers with no lost-time claims translates to approximately 19%, 52% and 42% of the total person-years worked in these sub-sectors respectively (see Table 4.10).

Table 4.10
Proportion of Person-years worked accounted for by Employers with no Lost-Time or Disabling Injury Claims, by Wholesale and Retail Sub-Sector – Alberta: 2009

Proportion of person-years worked accounted for by employers	With no Lost-Time Claims	With no Disabling Injury Claims
Wholesale and Retail	**41%**	**36%**
Wholesale Operations	50%	44%
Food and Beverage Stores	19%	17%
Industrial and Farm Equipment and Products	50%	36%
Automobiles, Sport Vehicles, Small Engines and Trailers	52%	48%
Office, Medical and Entertainment Equipment	52%	50%
Yard and Home Improvement Centres	23%	19%
Other Retail Services	42%	40%

Data Source: WCB Data, Prepared by Data Development and Evaluation

For employers who did submit claims, the Office, Medical and Entertainment Equipment sub-sector had the highest proportion of employers submitting one lost-time and disabling injury claim. The Yard and Home Improvement Centres sub-sector had the lowest proportion of employers submitting one lost-time and disabling injury claim. The Food and Beverage Stores sub-sector had the highest proportion submitting more than six lost-time claims. The Food and Beverage Stores sub-sector and the Other Retail Services sub-sector had the highest proportion submitting more than six disabling injury claims (see Table 4.11).

Table 4.11
Proportion of Employers with Lost-Time or Disabling Injury Claims, by Wholesale and Retail sub-sector – Alberta: 2009

Sub-Sector	1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
Wholesale Operations	64%	30%	6%	0%
Food and Beverage Stores	62%	28%	4%	6%
Industrial and Farm Equipment and Products	66%	29%	4%	0%
Automobiles, Sport Vehicles, Small Engines and Trailers	70%	27%	3%	0%
Office, Medical and Entertainment Equipment	74%	23%	2%	2%
Yard and Home Improvement Centres	51%	42%	4%	4%
Other Retail Services	62%	29%	7%	2%

Sub-Sector	1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
Wholesale Operations	61%	28%	7%	3%
Food and Beverage Stores	62%	26%	7%	5%
Industrial and Farm Equipment and Products	58%	31%	10%	1%
Automobiles, Sport Vehicles, Small Engines and Trailers	63%	31%	6%	0%
Office, Medical and Entertainment Equipment	67%	29%	3%	2%
Yard and Home Improvement Centres	48%	44%	5%	4%
Other Retail Services	59%	29%	8%	4%

Data Source: WCB Data, Prepared by Data Development and Evaluation

DEMOGRAPHICS OF INJURED WORKERS

Injured Worker Characteristics

In 2009, Sales and Service Occupations accounted for 17.4% of total lost-time claims, 17.4% of disabling injuries and 13.6% of those employed in the Wholesale and Retail sector. Mechanics had the largest separation between proportions of claims and employment with 12.1% of lost-time claims, 11.1% of disabling injury claims and 4.4% of those employed (see Table 5.1).

Table 5.1
Lost-Time and Disabling Injury Claims by Selected Occupation Group — Alberta: 2009

Occupation Group	Lost-time Claims	Disabling Injury Claims	Employment
Sales & Service Occupations N.E.C.*	17.4%	17.4%	13.6%
Retail Salespersons and Sales Clerks	18.4%	17.3%	22.7%
Clerical Occupations	10.3%	10.8%	8.7%
Trades Helpers, Construction, and Transportation Labourers and Related Occupations	8.3%	9.8%	3.5%
Mechanics	12.1%	11.1%	4.4%
Transportation Equipment Operators and Related Workers, Excl. Labourers	6.7%	6.5%	2.3%
Cashiers	5.0%	4.6%	10.0%
All Other Occupations	21.8%	22.5%	34.7%

*Not Elsewhere Classified
Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada, Labour Force Survey (Microdata Files)

In 2009, young workers aged 15 to 24 accounted for 20.6% of lost-time claims and 23.6% of disabling injury claims. However, both these numbers are below the estimated number of young workers employed in the Wholesale and Retail sector, at 26.7% (see Table 5.2).[3]

[3] Statistics Canada, Labour Force Survey (Microdata Files) for the Wholesale and Retail Trade.

Table 5.2
Lost-Time and Disabling Injury Claims by Age — Alberta: 2008-2009

Age	2008				2009			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
15-19 Years	576	9.0%	1,211	11.0%	386	7.0%	816	8.7%
20-24 Years	876	13.8%	1,713	15.6%	743	13.6%	1,400	14.9%
25-34 Years	1,336	21.0%	2,485	22.6%	1,191	21.7%	2,169	23.1%
35-44 Years	1,353	21.2%	2,291	20.8%	1,161	21.2%	1,901	20.2%
45-54 Years	1,410	22.1%	2,117	19.2%	1,246	22.8%	1,974	21.0%
55-64 Years	683	10.7%	999	9.1%	640	11.7%	983	10.5%
65+ Years	133	2.1%	183	1.7%	109	2.0%	148	1.6%
Unspecified	2	N/A	9	N/A	3	N/A	3	N/A
Total	**6,369**	**100.0%**	**11,008**	**100.0%**	**5,479**	**100.0%**	**9,394**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

In 2009, women and men were almost equally likely to be employed in the Wholesale and Retail sector (47.8% compared to 52.2%, respectively).[4] However, men accounted for 60.8% of lost-time claims and 63.4% of disabling injuries, while women represented only 39.2% of lost-time claims and 36.6% of disabling injuries (see Table 5.3).

Table 5.3
Lost-Time and Disabling Injury Claims by Gender — Alberta: 2008-2009

Gender	2008				2009			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Women	2,404	37.7%	3,930	35.9%	2,147	39.2%	3,432	36.6%
Men	3,965	62.3%	7,019	64.1%	3,332	60.8%	5,948	63.4%
Unspecified	0	N/A	59	N/A	0	N/A	14	N/A
Total	**6,369**	**100.0%**	**11,008**	**100.0%**	**5,479**	**100.0%**	**9,394**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

[4] Statistics Canada, Labour Force Survey (Microdata Files)

INJURY AND DISEASE ANALYSIS

Overexertion was the most common cause for lost-time claims in the Wholesale and Retail sector. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

Nature of Injury or Disease

The nature of injury is used to identify the physical characteristics of the injury or disease. In 2009, 95.6% of lost-time and 96.1% of disabling injury claims were traumatic injuries and disorders. The four most common traumatic injuries and disorders were: sprains, strains and tears, surface wounds and bruises, open wounds and fractures and dislocations (see Table 6.1).

Note 6.1
Throughout this section, the classifications used are based on the Canadian Standards Association (CSA) standards for categorizing occupational injury and disease information.

Most nature of injury categories in the Wholesale and Retail sector happened at a lower or similar frequency to that of the rest of the province.[5] The largest difference was found in burns, which had a lost-time claim frequency that was 0.7 times the frequency for all sectors in the province. The disabling injury claim frequency was also 0.7 times the frequency for all sectors.

Note 6.2
The CSA standard is designed so that Nature of Injury and Part of Body categories are directly linked when classifying injuries. This is also true for the relationship between the Source of Injury and Type of Event categories.

[5] Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.1
Nature of Injury or Disease — Wholesale and Retail: 2009

Nature of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Traumatic Injuries and Disorders	**5,236**	**95.6%**	**9,032**	**96.1%**
Sprains, Strains and Tears	2,806	51.2%	5,029	53.5%
Surface Wounds and Bruises	768	14.0%	1,309	13.9%
Open Wounds	442	8.1%	932	9.9%
Fractures and Dislocations	419	7.6%	568	6.0%
Burns	74	1.4%	118	1.3%
Other Traumatic Injuries and Disorders	727	13.3%	1,076	11.5%
Systemic Diseases and Disorders	**194**	**3.5%**	**293**	**3.1%**
Infectious and Parasitic Disorders	**1**	**<0.1%**	**1**	**<0.1%**
Neoplasms, Tumors and Cancer	**0**	**0.0%**	**0**	**0.0%**
Symptoms, Signs and Ill-Defined Conditions	**18**	**0.3%**	**27**	**0.3%**
Multiple Diseases, Conditions and Disorders	**1**	**<0.1%**	**1**	**<0.1%**
Other Diseases, Conditions and Disorders	**20**	**0.4%**	**20**	**0.2%**
Nature of Injury - Unknown	**9**	**0.2%**	**20**	**0.2%**
Total	**5,479**	**100.0%**	**9,394**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Part of Body Injured

In 2009, the trunk accounted for most injured body parts, at 41.6% of lost-time and 40.9% of disabling injuries in the Wholesale and Retail sector, followed by upper extremities, at 21.3% and 26.9%, and lower extremities, at 21.0% and 18.8% (see Table 6.2).

Most part of body categories happened at a similar or lower frequency in the Wholesale and Retail sector than in the rest of the province. The body systems category had a lower frequency of lost-time and disabling injury claims as both figures were 0.3 times the frequency for all sectors in the province.[6]

[6] Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.2
Part of Body Injured — Wholesale and Retail: 2009

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	**2,281**	**41.6%**	**3,844**	**40.9%**
Back, Including Spine, Spinal Cord	1,544	28.2%	2,540	27.0%
Other Trunk	737	13.5%	1,304	13.9%
Upper Extremities	**1,169**	**21.3%**	**2,526**	**26.9%**
Wrist(s) and Hand(s) Except Finger(s)	490	8.9%	1,041	11.1%
Finger(s), Fingernail(s)	380	6.9%	885	9.4%
Other Upper Extremities	299	5.5%	600	6.4%
Lower Extremities	**1,151**	**21.0%**	**1,763**	**18.8%**
Ankle(s) and Foot (Feet) Except Toes	532	9.7%	831	8.8%
Leg(s)	543	9.9%	834	8.9%
Other Lower Extremities	76	1.4%	98	1.0%
Head	**433**	**7.9%**	**581**	**6.2%**
Eye(s)	130	2.4%	187	2.0%
Other Head Parts	303	5.5%	394	4.2%
Neck, Including Throat	**100**	**1.8%**	**169**	**1.8%**
Body Systems	**24**	**0.4%**	**28**	**0.3%**
Multiple Body Parts	**318**	**5.8%**	**480**	**5.1%**
Part of Body - Unknown	**2**	**<0.1%**	**2**	**<0.1%**
Other Body Parts	**1**	**<0.1%**	**1**	**<0.1%**
Total	**5,479**	**100.0%**	**9,394**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Source of Injury or Disease

The source of injury or disease describes the object or substance that the worker came into contact with resulting in an injury or disease. The two primary sources of injury for the lost-time and disabling injury claims in the Wholesale and Retail sector in 2009 were containers, at 20.1% and 20.9% and persons, plants, animals, and minerals, at 19.8% and 19.0% respectively (see Table 6.3).

In the Wholesale and Retail sector most sources of injury categories happened at a similar or lower frequency than in the rest of the province. The person – other than injured or ill worker category had a lower frequency of lost-time and disabling injury claims at 0.2 and 0.1 times the frequency for all sectors in the province respectively.[7] The mineral – metallic or nonmetallic (except fuel) category had a lower frequency of lost-time and disabling injury claims both at 0.2 times the frequency for all sectors.

[7] Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.3
Source of Injury or Disease — Wholesale and Retail: 2009

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Persons, Plants, Animals and Minerals	**1,086**	**19.8%**	**1,787**	**19.0%**
Person-Injured or Ill Worker	981	17.9%	1,626	17.3%
Minerals - Metallic or Nonmetallic (except fuel)	3	0.1%	9	0.1%
Person-Other Than Injured or Ill Worker*	46	0.8%	55	0.6%
Other Persons, Plants, Animals & Minerals	56	1.0%	97	1.0%
Containers**	**1,100**	**20.1%**	**1,961**	**20.9%**
Structures and Surfaces	**935**	**17.1%**	**1,400**	**14.9%**
Parts and Materials	**615**	**11.2%**	**1,153**	**12.3%**
Vehicles	**443**	**8.1%**	**741**	**7.9%**
Machinery	**294**	**5.4%**	**529**	**5.6%**
Tools, Instruments and Equipment	**378**	**6.9%**	**757**	**8.1%**
Hand Tools - Nonpowered	204	3.7%	431	4.6%
Hand Tools - Powered	24	0.4%	54	0.6%
Other Tools and Equipments	150	2.7%	272	2.9%
Furniture and Fixtures	**276**	**5.0%**	**448**	**4.8%**
Chemicals and Chemical Products	**48**	**0.9%**	**74**	**0.8%**
Other Sources	**232**	**4.2%**	**374**	**4.0%**
Source of Injury - Unknown	**72**	**1.3%**	**170**	**1.8%**
Total	**5,479**	**100.0%**	**9,394**	**100.0%**

* Person – other than injured or ill worker: classifies workplace injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.
** Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.)
Data Source: WCB Data, Prepared by Data Development and Evaluation

Type of Event or Exposure

The type of event or exposure describes the incident that occurred at the time of the exposure that directly resulted in the injury or disease. Bodily reaction or exertion, and contact with objects and equipment were the two most common types of events or exposures that comprised 75.3% of lost-time claims and 78.6% of disabling injury claims in the Wholesale and Retail sector in 2009 respectively (see Table 6.4).

Most type of event or exposure categories in the Wholesale and Retail sector happened at a lower or similar frequency to that of the rest of the province. The largest difference was found in assaults and violent acts category, which had a lost-time and disabling injury claim frequency at 0.5 and 0.4 times the frequency for all sectors in the province respectively.[8]

[8] Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.4
Type of Event or Exposure — Wholesale and Retail: 2009

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injuries	%
Bodily Reaction or Exertion	**2,599**	**47.4%**	**4,565**	**48.6%**
Overexertion	1,474	26.9%	2,686	28.6%
Bodily Reaction*	686	12.5%	1,086	11.6%
Repetitive Motion	215	3.9%	399	4.2%
Other Bodily Reaction/Exertion	224	4.1%	394	4.2%
Contact with Objects or Equipment	**1,525**	**27.8%**	**2,820**	**30.0%**
Struck by Object	851	15.5%	1,517	16.1%
Struck against Object	316	5.8%	570	6.1%
Caught in Object	234	4.3%	468	5.0%
Rubbed or Abraded	44	0.8%	83	0.9%
Other Contact with Object/Equipment	80	1.5%	182	1.9%
Falls	**960**	**17.5%**	**1,425**	**15.2%**
Fall on Same Level	687	12.5%	1,048	11.2%
Fall to Lower Level	236	4.3%	313	3.3%
Other Falls	37	0.7%	64	0.7%
Transportation Accidents	**192**	**3.5%**	**283**	**3.0%**
Exposure to Harmful Substances	**133**	**2.4%**	**193**	**2.1%**
Assaults and Violent Acts	**51**	**0.9%**	**59**	**0.6%**
Assaults and Violent Acts by Person(s)	43	0.8%	48	0.5%
Other Assaults and Violent Acts	8	0.1%	11	0.1%
Fires and Explosions	**2**	**0.0%**	**4**	**0.0%**
Type of Event - Unknown	**17**	**0.3%**	**45**	**0.5%**
Total	**5,479**	**100.0%**	**9,394**	**100.0%**

* Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.

Data Source: WCB Data, Prepared by Data Development and Evaluation

Duration of Disability

Duration of disability[9] is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, the efforts of employers to introduce modified work programs to integrate injured workers more quickly back into the workforce can have a major impact on workdays lost.

Over half of the claims resulted in a duration of disability of 10 days or less. Claims with one to five days' duration represented 44.2% of all claims, and claims with six to ten days' duration accounted for 13.9%. Claims resulting in duration of disability of 51 days or more represented 9.9% of all claims (see Table 6.5). In all sectors in the province, 53.2% of lost-time claims resulted in 1-10 days lost, while 21.9% of claims required 31 or more days away from work.

Table 6.5
Duration of Disability — Alberta: 2008-2009

Duration of Disability	2008		2009	
	Lost-Time Claims	%	Lost-Time Claims	%
1-5 Days	2,859	44.9%	2,422	44.2%
6-10 Days	982	15.4%	763	13.9%
11-15 Days	489	7.7%	448	8.2%
16-20 Days	343	5.4%	273	5.0%
21-30 Days	413	6.5%	312	5.7%
31-40 Days	251	3.9%	242	4.4%
41-50 Days	169	2.7%	155	2.8%
51 Days or More	532	8.4%	540	9.9%
Unspecified	331	5.2%	324	5.9%
Total	**6,369**	**100.0%**	**5,479**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

[9] The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

OCCUPATIONAL FATALITIES

In 2009 the WCB accepted 10 fatalities in the Wholesale and Retail industries, accounting for 9.1% of all 110 fatalities in the province.

A WCB accepted occupational fatality is defined as the death of a worker resulting from a work-related incident or exposure which has been accepted by the WCB for compensation. The WCB classifies occupational fatalities into three general types as follows:

Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft, train, helicopter and water vehicle crashes. In 2009, two of the Wholesale and Retail fatalities accepted by WCB were motor vehicle incidents (see Table 7.1).

Workplace Incidents

Workplace incidents consist of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that E&I typically investigates. In 2009, five of the Wholesale and Retail fatalities accepted by WCB were workplace incidents (see Table 7.1).

Latent Workplace and Motor Vehicle Fatalities

Latent fatalities consist of workers who were involved in a workplace incident or exposure, or a motor vehicle incident that did not become a fatality until a much later date, often years later. These incidents were classified as occupational diseases. From 2002, these incidents will be separated out and included with either motor vehicle or workplace incident categories in accordance to their original injury.

Usually, other contributing factors cause a latent fatality, although these contributing factors are the result of the initial injury or exposure. A motor vehicle incident where a worker received leg injuries requiring surgery is a good example of this. Complications during the surgery result in a blood clot causing a fatal stroke. Thus, the injury is classified latent because the original injury caused the requirement for surgery. In 2009 there were two latent workplace fatalities in the Wholesale and Retail industries.

Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational disease, that is, disease known to be primarily or exclusively work-related such as asbestosis and coal workers' pneumoconiosis. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.*

Each year the WCB accepts some occupational fatality claims for compensation. Occupational fatality claims that were accepted in a particular year may include fatalities from prior years. In 2009, three of the fatalities accepted by WCB in the Wholesale and Retail industries were occupational disease incidents (see Table 7.1).

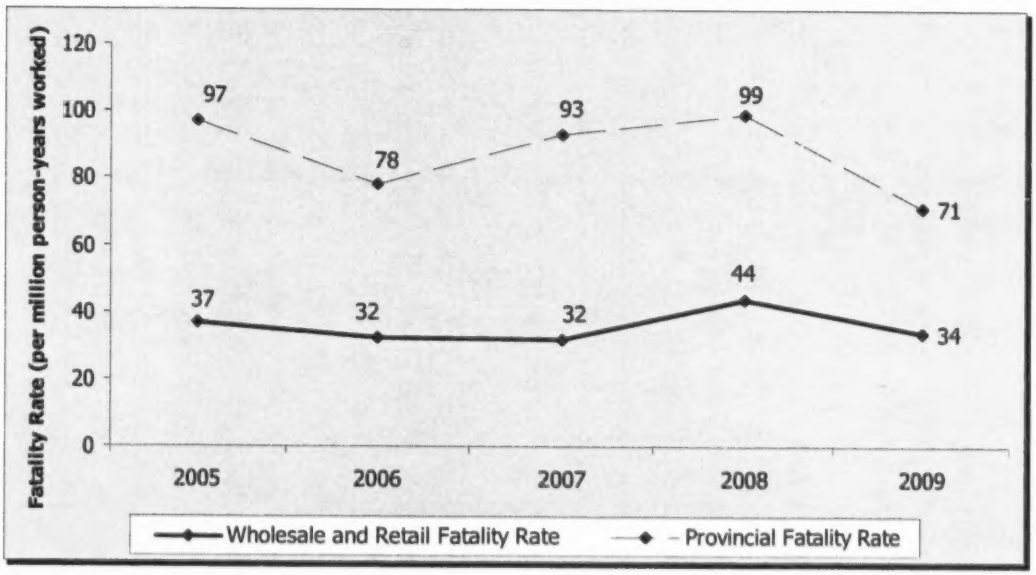
Table 7.1
Types of Occupational Fatalities Accepted by the WCB – Alberta: 2005 - 2009

Year	Motor Vehicle Incident		Workplace Incident		Occupational Disease		Total
	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2005	4	36.4%	6	54.5%	1	9.1%	11
2006	2	20.0%	4	40.0%	4	40.0%	10
2007	3	30.0%	5	50.0%	2	20.0%	10
2008	5	35.7%	3	21.4%	6	42.9%	14
2009	2	20.0%	5	50.0%	3	30.0%	10
Total	16	29.1%	23	41.8%	16	29.1%	55

Data Source: WCB Data, Prepared by Data Development and Evaluation

The fatality rate is calculated by dividing the number of accepted fatalities in the year by the number of person-years worked in that year. The result is expressed as "per million person-years worked." The 2009 fatality rate was 34 per million person-years worked (see Chart 7.1).

Chart 7.1
Fatality Rate[10] in Wholesale and Retail Industries: 2005-2009



Data Source: WCB Data, Prepared by Data Development and Evaluation

[10] Estimates are based upon information provided by the WCB. Fatalities occurring under Government of Canada jurisdiction are excluded from the calculation of the fatality rates.

Between 2005 and 2009, the WCB accepted 55 fatalities in the Wholesale and Retail industries. The Industrial and Farm Equipment and Products sub-sector had the most with 27 fatalities, accounting for 49.1% of total fatalities (see Table 7.2). In the past five years, only one fatality has been reported in the Office, Medical and Entertainment Equipment sub-sector.

Table 7.2
Wholesale and Retail Occupational Fatalities Accepted by the WCB by Sub-Sector – Alberta: 2005-2009

Sub-Sector	2005	2006	2007	2008	2009	Number of Fatalities	%
Automobiles, Sport Vehicles, Small Engines and Trailers	1	2	2	4	3	12	21.8%
Food and Beverage Stores	2	1	1	1	1	6	10.9%
Industrial and Farm Equipment and Products	6	5	5	8	3	27	49.1%
Other Retail Services	1	0	0	0	1	2	3.6%
Wholesale Operations	0	0	2	0	2	4	7.3%
Yard and Home Improvement Centres	1	1	0	1	0	3	5.5%
Office, Medical and Entertainment Equipment	0	1	0	0	0	1	1.8%
Wholesale and Retail Industries	**11**	**10**	**10**	**14**	**10**	**55**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

CERTIFICATE OF RECOGNITION

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are jointly issued by Certifying Partners and E&I.[11]

In 2009, about three percent of Wholesale and Retail sector's employers were COR holders. These employers represented 25.0% of the total person-years worked in the Wholesale and Retail sector. In 2009, 9.5% of Industrial and Farm Equipment and Products employers had valid CORs, representing 39.3% of the total person-years worked in that sub-sector (see Table 8.1).

Table 8.1
Employers With Valid COR — Alberta: 2009

Sub-Sector	Number of Certified Employers	Total Number of Employers	% of Total Employers Certified	% of Total Person-Years Certified
Wholesale and Retail	**680**	**20,046**	**3.4%**	**25.0%**
Automobiles, Sport Vehicles, Small Engines and Trailers	133	3,911	3.4%	11.0%
Food and Beverage Stores	20	2,652	0.8%	41.9%
Industrial and Farm Equipment and Products	430	4,529	9.5%	39.3%
Office, Medical and Entertainment Equipment	10	1,500	0.7%	8.9%
Wholesale Operations	28	1,475	1.9%	11.5%
Yard and Home Improvement Centres	23	379	6.1%	40.3%
Other Retail Services	36	5,600	0.6%	19.9%

Data Source: WCB Data, Prepared by Data Development and Evaluation

[11] For more information on the COR program visit http://www.employment.alberta.ca/SFW/334.html

In 2009, the lost-time claim rate for COR holders in the Wholesale and Retail sector decreased by 6.8%. The disabling injury rates for both COR and non-COR employers decreased by 6.9% and 8.0%, respectively (see Table 8.2). For all sectors in the province, the lost-time claim and disabling injury rates for COR holders were 1.75 and 4.11 per 100 person-years respectively, for non-COR holders the respective numbers were 1.66 and 2.44.

Comparing COR holders against all non-COR holders provides useful information about each group, although it does not compare like-with-like. A COR is given to employers who develop health and safety programs that meet established standards, with this group seeing continued improvement in their lost-time claim rates. Some non-COR holders have good programs in place above this standard, whereas others do not. This makes evaluating improving health and safety trends less clear for this group.

Table 8.2
Lost-Time Claim and Disabling Injury Rates for Wholesale and Retail COR Holders — Alberta: 2008-2009

Employer	Year	Number of Accounts	Person-Years Worked	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claim Rate	Disabling Injury Rate	Change in Lost-Time Claim Rate	Change in Disabling Injury Rate
COR	2008	669	80,662	2,131	4,690	2.64	5.81	-6.8%	-6.9%
	2009	680	74,185	1,826	4,016	2.46	5.41		
Non-COR	2008	19,524	239,627	4,226	6,303	1.76	2.63	-6.8%	-8.0%
	2009	19,366	222,349	3,653	5,378	1.64	2.42		

Data Source: WCB Data, Prepared by Data Development and Evaluation

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APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

Modified Work Claim

A modified work claim is a claim for an occupational injury or disease where a worker had their normal work duties altered to enable them to remain working without losing time from work. Also included are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease.

Disabling Injury Claim

Disabling injury (DI) claims combine both the lost-time and modified work concepts to produce an overall figure where an occupational injury or disease disables the worker causing either time-lost from work or for their normal work duties to be modified.

Person-Years Worked

Person-years worked are estimates calculated from wage and payroll data provided by account holders to the WCB. Alberta Employment and Immigration uses data to estimate an average industry wage, and uses the average industry wage and employer payroll data to estimate person-years worked for each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

Lost-Time Claim Rate

The lost-time claim rate is calculated by dividing the number of lost-time claims by the person-years worked estimate, and multiplying the result by 100. The lost-time claim rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, which will result in time lost from work. Comparisons of lost-time claim rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTC's}}{\text{Person-years worked}} \times 100$$

Disabling Injury Rate

The disabling injury rate is calculated by dividing the number of disabling injury claims by the person-year estimates, and multiplying the result by 100. The disabling injury rate represents the probability or risk of a disabling injury or disease to a worker during a period of one year of work. The disabling injury rate is similar to the LTC rate although it covers a broader range of injuries, including those that are less severe in nature (do not require time away from work). The rate represents the number of claims per 100 person-years worked and includes claims made for both lost-time and modified work.

$$\text{Disabling Injury Rate} = \frac{\text{Number of DI's}}{\text{Person-years worked}} \times 100$$

Duration (Days lost)

The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Employment and Immigration obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease, although it provides a consistent method for reporting and observing trends in duration.

Duration Rate

The duration rate is calculated by dividing the number of workdays lost (disability days) by the person-years worked estimate, and multiplying by 100. The result is expressed as days lost per 100 person-years worked, and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

$$\text{Duration Rate} = \frac{\text{Disability Days}}{\text{Person-years worked}} \times 100$$

Industry Coverage

About 80% of employed persons in Alberta are covered by WCB. This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as are some industries where WCB coverage is not compulsory.

WCB Accepted Fatality

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

Fatality Rate

The fatality rate is calculated by dividing the number of accepted fatalities by the person-years worked estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years worked. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

$$\text{Fatality Rate} = \frac{\text{Number of Fatalities}}{\text{Person-years worked}} \times 1{,}000{,}000$$

Number of Times Higher/Lower than the Provincial Average

The number of times higher/lower than the provincial average is used to compare the performance of the industries with the province regarding specific injury or disease. A number less than one indicates that the injury of the industries is lower than the provincial average; if equal to one it indicates the injury of the industries is the same as the provincial average and a number greater than one indicates that the injury of the industries is higher than the provincial average.

$$\frac{\text{Per cent of Total Claims for the Industries} \times \text{Industries' LTC Rate}}{\text{Per cent of Total Claims for the Province} \times \text{Provincial LTC Rate}}$$

Where:

$$\text{Per cent of Total Claims for the Industries} = \frac{\text{Number of LTCs for the Industries (e.g. back injury)}}{\text{Total LTCs for the Industries}} \times 100$$

$$\text{Per cent of Total Claims for the Province} = \frac{\text{Number of LTCs for the Province (e.g. back injury)}}{\text{Total LTCs for the Province}} \times 100$$

N.E.C.

Not Elsewhere Classified

Labour Force Survey

The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. The objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications (employed, unemployed, and not in the labour force) and to provide descriptive and explanatory data on each of these categories. Data from the survey provide information on major labour market trends such as shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates.

For the most part, annual LFS data has been analyzed alongside injury and disease information to aid the understanding of injury risk or frequency by worker type. The LFS uses a different industry classification from WCB, although there are similarities in structure. Where possible, the two data sources are used comparably and proportions (of totals) have been used to evaluate information generated from both sources. Using proportions attempts to overcome obvious distortions in the numbers in employment from both sources, although the impact on the proportions from industry coverage differences is unclear. In certain instances, monthly LFS micro-data files have been combined and used to produce proportion estimates for the whole year for particular sub-groups of the population.

For further information on the LFS, please see

http://www.employment.alberta.ca/BI/2599.html

APPENDIX B: WHOLESALE AND RETAIL INDUSTRIES WCB INDUSTRY CODES

1. Wholesale Operations

62900 – Wholesale with or without Warehousing
69916 – Wholesale Food Distribution

2. Food and Beverage Stores

63100 – Food/Convenience Stores
63103 – Butcher Shops/Home Provisioners
63105 – Liquor/Wine/Beer Sales Outlets
65406 – Gas Bar/Car Wash – No Auto Service

3. Industrial and Farm Equipment and Products

37902 – Chemical Products – Packaging/Distribution
52400 – Grain/Seed Handling Operations
60800 – Bulk Petroleum Dealers
62200 – Farm Implement Dealers
62201 – Mobile Equipment Dealers
62302 – Machinery/Equipment - Sales, Service, Repair (N.E.C.)
62303 – Industrial Supply Stores
69300 – Propane Dealers
86905 – Safety Equipment – Sale/Rental
89910 – Industrial and Oilfield Equipment – Rental

4. Automobiles, Sport Vehicles, Small Engines and Trailers

16300 – Tire Retreading
62701 – Auto Wreckers
65400 – Service Stations
65600 – Auto Dealers
65800 – Automobile Body Repair
65808 – General Automotive Repair
65809 – Electroplating Auto Parts
69912 – Trailers – Sales/ Rental with Service
69915 – Sport Vehicles – Sales/Service
89922 – Industrial Camp Trailers – Rental

5. Office, Medical and Entertainment Equipment

33901 – Medical Equipment – Sales/Service
62300 – Office Equipment – Sales/Service
67602 – Entertainment Equipment – Sales/Service

6. Yard and Home Improvement Centres

25403 – Home Improvement Centres
62908 – Garden Centres
69301 – Coal/Wood Yards

7. Other Retail Services

62903 – Sales Operations (N.E.C.)
64200 – Department/General Stores
66300 – Shoe Stores
66900 – Clothing/Yard Goods Stores
67300 – Hardware/Auto Parts Stores/Etc.
67601 – Furniture Stores
67604 – Appliances – Sales/Service
67802 – Household Appliances – Service Only
68100 – Drug Stores
69100 – Book/Stationery Stores/Etc.
69200 – Florists – Retail/Wholesale
69500 – Jewellery Stores
69901 – Auctions (N.E.C.)
69904 – Novelty/Gift/Hobby Stores/Etc.
69914 – Pet/Seed/Feed Stores
86909 – Inventory Services
89100 – Travelling Sales/Manufacturing Agents
89908 – Small Equipment/Appliances - Rental

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Email: whs@gov.ab.ca

Employment and Immigration website:

http://employment.alberta.ca

Work Safe Alberta website:

www.worksafe.alberta.ca

Occupational Health and Safety Contact Centre:

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

http://www.employment.alberta.ca/SFW/2874.html

Certificate of Recognition (COR) Program:

http://www.employment.alberta.ca/SFW/334.html